1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Trade name: Cergo Die Color Layer

Company: DeguDent GmbH
Postfach 1364
D-63403 Hanau
Telephone: +49 (0)6181/59-5767
Telefax: +49 (0)6181/59-5879
Emergency telephone number: +49 (0)180 / 23 24-555

Use of the Substance / Preparation: For dental use only.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
The preparation contains:
Pigments
binder

Information on ingredients / Hazardous components

- ethanol
  CAS-No. 64-17-5
  EC-No. 200-578-6
  > 50%

See chapter 16 for text of risk phrases

3. HAZARDS IDENTIFICATION

Highly flammable.
Vapours can form explosive mixtures with air.

4. FIRST AID MEASURES

General advice
Remove contaminated or saturated clothing immediately and dispose off safely.

Inhalation
Bring affected person outside and ensure that he/she is comfortable.
Obtain medical attention.

Skin contact
Wash off with plenty of water.
Eye contact
With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Consult an ophthalmologist.

Ingestion
Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Should vomiting occur, be sure to keep victim’s head below hips to avoid aspiration of vomitus into the lungs.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
water spray, alcohol-resistant foam, CO2, dry powder

Extinguishing media which must not be used for safety reasons
high volume water jet

Specific hazards during fire fighting
Formation of flammable or explosive vapour/air mixtures possible. In case of fire cool endangered containers with water.

Special protective equipment for fire-fighters
In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Ensure adequate ventilation. Keep away from sources of ignition - No smoking.

Environmental precautions
Do not allow entrance in soil, stretches of water, drainage systems.

Methods for cleaning up
Take up mechanically or with an absorbent material. Fill into marked, sealable containers. Suitable binder: universal absorbent

7. HANDLING AND STORAGE

Handling
Safe handling advice
Provide good ventilation or extraction. Avoid contact with skin and eyes.

Advice on protection against fire and explosion
Take precautionary measures against static charges, keep away from sources of ignition. Do not smoke. Explosion protection equipment required.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

- **ethanol**
  
<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>64-17-5</th>
<th>EC-No.</th>
<th>200-578-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control parameters</td>
<td>1000 ppm</td>
<td>Time Weighted Average (TWA):EH40</td>
<td>OES</td>
</tr>
<tr>
<td></td>
<td>1920 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering measures
Provide good ventilation or extraction.

Personal protective equipment

Respiratory protection
If workplace exposure limit is exceeded apply Respirator with brown A-type filter.

Hand protection
Wear protective gloves made of the following materials: solvent-resistant material.

<table>
<thead>
<tr>
<th>Glove material</th>
<th>butyl-rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material thickness</td>
<td>0.5 mm</td>
</tr>
<tr>
<td>Break through time</td>
<td>480 min</td>
</tr>
<tr>
<td>Method Source: GESTIS substance database (hazardous substance information system of commercial professional associations)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glove material</th>
<th>Fluorinated rubber (FKM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material thickness</td>
<td>0.4 mm</td>
</tr>
<tr>
<td>Break through time</td>
<td>480 min</td>
</tr>
<tr>
<td>Method Source: GESTIS substance database (hazardous substance information system of commercial professional associations)</td>
<td></td>
</tr>
</tbody>
</table>

The suitability for a specific workplace should be discussed with the producers of the protective gloves.
The exact break through time can be obtained from the protective glove producer and this has to be observed.

preventive skin protection
Use barrier cream regularly.

Eye protection
safety glasses with side-shields

Hygiene measures
Do not inhale vapours / aerosols.
Avoid contact with eyes.
Remove contaminated or saturated clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
- **Form**: liquid
- **Colour**: according to the coloration
- **Odour**: characteristic

**Safety data**
- **pH**: ca. 7 (20 °C) neutral
- **Melting point/range**: -117 °C related to substance: ethanol
- **Boiling point/range**: 78 °C (1013 hPa) related to substance: ethanol
- **Flash point**: 17 °C Method: DIN 51 755 related to substance: ethanol
- **Ignition temperature**: 425 °C Method: DIN 51 794 related to substance: ethanol
- **Lower explosion limit**: 3.5 %(V) related to substance: ethanol
- **Upper explosion limit**: 28 %(V) related to substance: ethanol
- **Vapour pressure**: ca. 60 hPa (20 °C) related to substance: ethanol
- **Density**: 0.81 g/cm3 (20 °C) related to substance: ethanol
- **Water solubility**: miscible (20 °C)

10. STABILITY AND REACTIVITY

- **Conditions to avoid**: Avoid temperatures above 40 °C
- **Hazardous decomposition products**: no
- **Thermal decomposition**: Distills without decomposition at atmospheric pressure.
- **Hazardous reactions**: Reacts violently with: strong oxidants.

11. TOXICOLOGICAL INFORMATION
SAFETY DATA SHEET  (91/155/EWG)
Cergo Die Color Layer

material No. specification VA-Nr
130154
Version Revision date
3.0 / GB 04.03.2004
Print Date Page
30.03.04 5 / 8

Acute oral toxicity  LD50 rat:  7060 mg/kg
possibly harmful

Acute inhalation toxicity  LC50 rat:  38 mg/l / 10 h
Inhalation of vapours in high concentration may cause irritation of respiratory system.
Inhalation of high vapour concentrations can cause CNS-depression and narcosis.

Skin irritation  May be irritating on frequent or long-term contact.

Eye irritation  possibly irritating

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
Biodegradability  Result:  94 %
Method: (DOC; modif. OECD screening test / OECD 301 E)

Behaviour in environmental compartments

Ecotoxicity effects
Toxicity to fish  LC0 Leuciscus idus melanotus:  > 1000.00 mg/l / 48 h
Method: (DIN 38412, part 15)

Toxicity to daphnia  EC50 Daphina magna:  > 1000.00 mg/l / 24 h
Method: (DIN 38412, part 11)

13. DISPOSAL CONSIDERATIONS

Product
Disposal according to local authority regulations.

Uncleaned packaging
Disposal according to local authority regulations.

14. TRANSPORT INFORMATION

Land transport ADR/RID/GGVSE (Germany)

<table>
<thead>
<tr>
<th>Class</th>
<th>ADR/RID-Labels</th>
<th>UN-No</th>
<th>Packaging group</th>
<th>orange warning plate</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>1170</td>
<td>II</td>
<td>33 / 1170</td>
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</table>

Description of the goods (Technical name)
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Sea transport IMDG-Code/GGVSee

- Class: 3
- UN-No: 1170
- Packaging group: II
- Proper technical name (Proper shipping name): ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Air transport ICAO-TI/IATA-DGR

- Class: 3
- UN-No: 1170
- Packaging group: II
- Proper technical name (Proper shipping name): Ethanol solution

Loading instructions/Remarks
- IATA_C: ERG-Code 3L
- IATA_P: ERG-Code 3L
- ADR: Observe listed materials regulation §7, paragraph 1 GGVSE

15. REGULATORY INFORMATION

Labelling according to EEC Directive

- hazard-defining component(s)
  - ethanol

Symbol(s) | F | Highly flammable
R-phrase(s) | R11 | Highly flammable.
S-phrase(s) | S 7 | Keep container tightly closed.
| S16 | Keep away from sources of ignition. - No smoking.

National legislation

employment restriction: The employment limitations under the protection of young persons act, the laws on pregnant women and young mothers and work at home is/are to be observed.

16. OTHER INFORMATION

Risk phrase (R phrase) texts

- ethanol
  - R11: Highly flammable.

Further information

Changes since the last version will be highlighted in the margin. This version replaces all previous versions.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
# SAFETY DATA SHEET  (91/155/EWG)

**Cergo Die Color Layer**

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<thead>
<tr>
<th>material No. specification</th>
<th>Version</th>
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<tr>
<td>VA-Nr</td>
<td>Revision date</td>
<td>04.03.2004</td>
</tr>
<tr>
<td></td>
<td>Print Date</td>
<td>30.03.04</td>
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<td>8 / 8</td>
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